



2006 (7TH) ROUND SALMON APPLICATION FORMS

**ESTUARINE/NEARSHORE
MARINE**

18h

**WOLCOTT/DOSEWALLIPS RIVER ESTUARY
RESTORATION PROJECT**

JUNE 19, 2006

FOR USE IN THE 2006 GRANT CYCLE ONLY

Application Authorization Memorandum

Each organization submitting a project must complete this form.

TO: Salmon Recovery Funding Board (SRFB)
PO Box 40917
Olympia, Washington 98504-0917

THROUGH: _____ **Hood Canal Coordinating Council** _____
(lead entity name)

FROM: _____ **Hood Canal Salmon Enhancement Group** _____
(applicant name)

Through the lead entity identified above, the SRFB is hereby requested to consider this application for financial assistance for the Salmon Recovery project(s) described below and to grant funding from such State and Federal sources as may be available. This application is prepared with knowledge of and in compliance with SRFB's policies and procedures. Further, we agree to cooperate with the SRFB by furnishing such additional information as may be necessary to execute a SRFB Project Agreement and to adhere to all appropriate state and federal statutes governing grant monies under the Project Agreement. We are aware that the grant, if approved, is paid on a reimbursement basis. We agree that all application materials, including photos, slides, site drawings, maps, etc., become the property of IAC/SRFB and may be used by IAC/SRFB for education, information, or other non-commercial purposes in publications, presentations or on the IAC/SRFB web site.

Project Name(s): _____ **Dosewallips River Estuary Restoration Project** _____

(Attach list

if necessary)

I/we certify that to the best of our knowledge, the data in this application is true and correct. In addition, I/we certify that the matching resources identified in the grant are committed to the above project. I/we acknowledge responsibility for supporting all non-cash commitments and donations should they not materialize.

Authorized Representative:



(signature)

August 30, 2006

(date)

Printed Name and Title: _____ **Alan D. Adams Vice President** _____

1. General Application Information

(ENTER ON PRISM TAB 1)

Project Name **Dosewallips River Estuary Restoration Project**

Project Type (check one)

☒ **Restoration only** (Estuarine/Nearshore Marine)

☐ **Combined** (acquisition and restoration)

2. Applicant / Organization Information

(ENTER ON PRISM TAB 1 – SEARCH FOR ORGANIZATION)

Organization Name

Organization Type (check one)

☐ City/Town

☐ County

☐ Private Landowner

☐ Conservation District

☐ Native American Tribe

☐ Non-profit Organization

☒ RFEQ

☐ Special Purpose District

☐ State Agency

Organization Address **Hood Canal Salmon Enhancement Group**

Address **PO Box 2169**

City/Town **Belfair**

State, Zip **Washington 98528**

Telephone #**360 275-7575**

FAX #**360 275-0648**

Internet e-mail address Eileen@hcseg.org Web site URL www.hcseg.org

3. Project Contact Information

Complete one for each contact.

(ENTER ON PRISM TAB 1 – SEARCH FOR PERSON)

☐ Mr. ☐ Ms. Title **Executive Director**

First Name **Neil**

Last Name **Werner**

☒ Primary Contact OR ☐ Alternate Contact

Contact Mailing Address

Address **PO Box 2169**

Work Telephone #**360 275-0373**

City/Town **Belfair**

FAX #**360-275-0648**

State, Zip **Washington 98528**

Internet e-mail address neil@hcseg.org

4.a. Goal and Objective and Measurements Estuarine/Nearshore Marine (Restoration projects only)

Select one goal and one objective that best fits your project
and respond all to the measurements for that goal and objective.

(ENTER GOAL AND OBJECTIVE ON PRISM TAB 2; SAVE, THEN
ENTER MEASUREMENT RESPONSES ON PRISM TAB 6)

<p>Goal: The goal of the project is to restore channel meander migration patterns within the estuary.</p> <p>Objective: The objective of the project is to restore the flood plain meander functions, sediment transport functions, dissipation, and water storage in the estuary.</p>	X
<p>Measurement: Amount of estuarine/freshwater area created? [Acres of artificial estuary proposed for creation and actually created from an area not formerly saline.]</p>	<p>_____ Acres</p>
<p>Measurement: Amount of estuarine/freshwater area of invasive species treated? [The acreage of invasive species proposed for treatment and actually treated in an estuary. A treatment may only be for a portion of an estuary such as removal of Spartina.]</p>	<p>_____ Acres</p>
<p>Measurement: Amount of material removed? [Buildings raceways, traps, gates and fences.]</p>	<p>___6___ Each</p>
<p>Measurement: Average stream width, in feet, upstream of barrier. [Report the average width of the stream upstream from the barrier.]</p>	<p>_____ Feet</p>
<p>Measurement: Length of stream section treated? [The number of miles of stream treated. Add one side only.]</p>	<p>_____ Miles</p>
<p>Measurement: Percent rearing habitat opened up? [Report the percent of rearing habitat that is being opened up as a result of this project.]</p>	<p>___50___ Percent</p>
<p>Measurement: Percent spawning habitat opened up? [Report the percent of spawning habitat that is being opened up as a result of this project.]</p>	<p>_____ Percent</p>

5. Short Description of Project

Describe project, what will be done, and what the anticipated benefits will be in 1500 characters or less.
(ENTER ON PRISM TAB 2)

NOTE: Many audiences, including the SRFB, SRFB's Technical Review Panel, media, legislators, and the public who may inquire about your project use this description. Provide as clear, succinct and descriptive an overview of your project as possible – many will read these 1-2 paragraphs!

The description should state what is proposed. Identify the specific problems that will be addressed by this project, and why it is important to do at this time. Describe how, and to what extent, the project will protect, restore or address salmon habitat. Describe the general location, geographic scope, and targeted species/stock. This short description should be the summary of the detailed proposal set out under Evaluation Proposal, with particular emphasis on questions I-IV.

The database limits this space to 1500 characters (including spaces); any excess text will be deleted.

Under this proposal, the Hood Canal Salmon Enhancement Group will remove an existing storage and hatchery facilities including concrete slabs, remove ~600 cu yards of fill and debris, remove 80n cu yards of concrete raceways and restore the native vegetation. This work continues a highly successful partnership between the HCSEG, Hood Canal Coordinating Council (HCCC), Port Gamble S'Klallam Tribe (PGST), Washington Department of Fish and Wildlife (WDFW), the USFWS and Brinnon-area residents.

6. Summary of Funding Request and Match Contribution

Remember to update this section whenever changes
are made to your cost estimates.
(ENTER ON PRISM TAB 3)

TOTAL PROJECT COST (A + B) (Sponsor Match & SRFB Contribution)

\$ 78,000

A. Sponsor Match Contribution (15% minimum is required for match)

Appropriation/Cash	\$ _____
Bonds - Council	\$ _____
Bonds - Voter	\$ _____
Cash Donations	\$ _____
Conservation Futures	\$ _____
Donations	
Donated Equipment	\$ _____
Donated Labor	\$ _____
Donated Land	\$ _____
Donated Materials	\$ _____
Donated Property Interest	\$ _____
Force Account	
Force Acct - Equipment	\$ _____
Force Acct - Labor	\$ _____
Force Acct - Material	\$ _____
Grants*	
Grant - Federal	\$ _____
Grant - Local	\$ 15,600 _____
Grant - Private	\$ _____
Grant - State	\$ _____

Total Sponsor Match Contribution

\$ 15,600

15% Minimum Match Required
of A. TOTAL PROJECT COST

B. SRFB Contribution (grant request)

\$ 62,400

\$5,000 Minimum Request

***Note, be sure to identify the name and type of any matching grant in the Application Questionnaire Section.**

8. Cost Estimate Estuarine/Nearshore Marine

ESTUARINE AND MARINE NEARSHORE includes those items that affect or enhance fish habitat within the shoreline riparian zone or below the mean high water mark of the water body. Items include work conducted in or adjacent to the intertidal area and in subtidal areas. Items may include beach restoration, bulkhead removal, dike breaching, plant establishment/removal/management, and tide channel reconstruction.

Complete only items that apply to your project.

TOTAL COST must include the SRFB and Sponsor's Match Contribution.

Use only whole dollar amounts.

(ENTER ON PRISM TAB 5)

Item	Unit	Qty.	Total Cost	Description Needed	Description (60 characters max.)
Beach nourishment	Cubic yds			Optional	
Bulkhead removal/reconstruction	Linear ft			Optional	
Clear and grub	Sq ft			Optional	
Demolition Building & utilities	Lump Sum		11,000	Optional	
Demolition Concrete Raceways	Cubic yards	80	17,000	Optional	
Demolition Support Structures	Lump Sum		6,000	Optional	
Erosion control	Sq ft			Optional	
Excavation	Cubic yds	600	11,400	Optional	
Fencing	Linear ft			Optional	
Flushing/Passage Improvements	Lump sum			Describe	
Landfill/debris removal	Cubic yds			Optional	
Mobilization/demobilization	Lump sum		5,000	Optional	
Permits	Lump sum		3,000	Optional	
Plant removal/control	Acres			Optional	
Riparian plant installation	Lump Sum		5,000	Describe	Replant native vegetation on disturbed soils under guidance of WDFW biologists
Riparian plant materials (species)	Each			Describe	
Road repair/asphalt	Lump sum			Optional	
Shoreline restoration	Linear ft			Describe	
Signage	Each			Describe	
Site maintenance	Lump sum			Describe	
Tidal channel reconstruction	Lump sum		5,000	Optional	
Tide gate removal/improvements	Each			Optional	
Traffic control	Lump sum			Describe	
Utility crossing	Lump sum			Describe	
Woody debris placement	Each			Describe	
Work site restoration	Acres			Describe	
Sales Tax			4570		
Sub-Total			67,970		
Architecture, Engineering, & Admin. (30% of Sub-Total)			10,030		
TOTAL COSTS			78,000		

9a. Application Questionnaire

All applicants must answer the following questions.
(ENTER ON PRISM TAB 8)

Cost Efficiencies

For any grants listed in the Summary of Funding Request and Match Contribution Section, are there any restrictions on the use of these grant funds? When and how long will the grant funds be available to this project? ***No restrictions other than for restoration activities associated with this project. Grant funds are available upon acceptance and then from two to five years for completion.***

Describe the type of donated labor (skilled and unskilled), donated equipment, and donated materials that will be used for this project, identified in the Summary of Funding Request and Match Contribution Section. ***No donated labor will be used on this project***

Land Ownership

What type of landowner currently owns the property? (Federal, Local, Private, State or Tribal.)
The land is federally owned and operated by the United States Fish & Wildlife Service

What is the current land use of the site, and its history? Describe past human uses and salmon habitat functions. ***The current land use is for diverting and catching adult spawning salmon for egg and sperm take.***

Worksite Location Data

What are the geographic coordinates of the work site(s) (in degrees, minutes and seconds)? [If you do not have them, you may leave this question blank.] ***122°53'30" 47°41'30"***

What is the township/range/section of the work site(s)? ***Township 25 N, Range 2 W, Section 2***

In what county(s) is the work site(s) located? In what city, if applicable? ***Jefferson County***

In what Water Resource Inventory Area(s) (WRIA) is the work site located? (Provide WRIA name and WRIA number.) ***WRIA 16 Skokomish/Dosewallips***

Is the work site on a stream and/or other waterbody? If yes, name the stream and/or waterbody. If the stream is a tributary of a larger stream, also name the larger stream. If you know the river mile, list it here. ***The Wolcott project lies at the mouth of the Dosewallips River and Quilcene Bay***

Is your work site(s) located within estuarine or saltwater habitat? If so, name it. How close is it to fresh water systems? Name any other estuary or habitat adjacent to this site. ***The Wolcott project lies at the mouth of the Dosewallips River and Quilcene Bay***

Is the work site(s) located within a park, wildlife refuge, natural area preserve, or other recreation or habitat site? If yes, name the area. ***The site lies adjacent and North of Dosewallips State Park***

9c. Application Questionnaire

Non-profit organizations must answer the following questions.

Is your organization registered as a non-profit with the Washington Secretary of State? If so, what is your Unified Business Identifier (UBI) number? **Yes #601-285-471**

What date was your organization created? **1990**

How long has your organization been involved in salmon and habitat conservation? **16 Years**

10. Work Site Information

(ENTER ON PRISM TAB 9)

Driving Directions (provide directions that will enable staff to locate the project): ***The project site lies on the east side of Highway 101 directly across the street from the Brinnon Motel and Community Center ten miles South of Quilcene and 20 miles North of Shelton***

Current Landowner(s) of the site (name and address). Remember to complete the Landowner Willingness Form. **USFWS**

11. Permits

Check the appropriate boxes to indicate required and/or anticipated permits.
General permit information can be obtained at the Dept. of Ecology Permit Assistance Center
1-800-917-0043 or on their Internet site
<http://www.ecy.wa.gov/programs/sea/pac/index.html>.
(ENTER ON PRISM TAB 10)

Permits	Comments Regarding Permit Status
<input type="checkbox"/> Aquatic Lands Use Authorization (Dept of Natural Resources)	
<input type="checkbox"/> Building Permit (City/County)	
<input type="checkbox"/> Clear & Grade Permit (City/County)	
<input checked="" type="checkbox"/> Cultural Assessment [Section 106] (CTED-OAHP)	
<input checked="" type="checkbox"/> Dredge/Fill Permit [Section 10/404 or 404] (US Army Corps of Engineers)	
<input checked="" type="checkbox"/> Endangered Species Act Compliance [ESA] (US Fish & Wildlife/NMFS)	
<input type="checkbox"/> Forest Practices Application [Forest & Fish] (Dept of Natural Resources)	
<input type="checkbox"/> Health Permit (Dept of Health/County)	
<input checked="" type="checkbox"/> Hydraulics Project Approval [HPA] (Dept of Fish & Wildlife)	
<input type="checkbox"/> NEPA (Federal Agencies)	
<input type="checkbox"/> SEPA (Local or State Agencies)	
<input type="checkbox"/> Shoreline Permit (City/County)	
<input checked="" type="checkbox"/> Water Quality Certification [Section 401] (County/Dept of Ecology)	
<input type="checkbox"/> Water Rights/Well Drilling Permit (Dept of Ecology)	
<input type="checkbox"/> Other Required Permits (identify)	
<input type="checkbox"/> None – No permits Required	

12. Salmonid Species Information

Identify one or more targeted Salmonid species (directly on-site, indirectly downstream or within the rearing/migration corridor) whose habitat conditions you are attempting to improve or protect. Select one Primary Species.
(ENTER ON PRISM TAB 11)

Salmonid Species	Species Targeted (select as many as apply)	Primary Species (select only one)
Bull Trout	<input type="checkbox"/>	<input type="checkbox"/>
Chinook	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Chum	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Coho	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cutthroat	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pink	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Summer Chum	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Steelhead	<input type="checkbox"/>	<input type="checkbox"/>

13a. Habitat Factors Addressed

Identify one or more Habitat Factors being addressed by this Project and select one Primary Factor.

For definitions of Habitat Factors, see Manual 18b, Appendix B.

(ENTER ON PRISM TAB 11)

Habitat Factors	Project Addresses (select as many as apply)	Primary Factor (select only one)
1. Biological Processes	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Channel Conditions	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Estuarine and Near-shore Habitat	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4. Floodplain Conditions	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Lake Habitat	<input type="checkbox"/>	<input type="checkbox"/>
6. Loss of Access to Spawning and Rearing Habitat	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Riparian Conditions	<input type="checkbox"/>	<input type="checkbox"/>
8. Streambed Sediment Conditions	<input type="checkbox"/>	<input type="checkbox"/>
9. Water Quality	<input type="checkbox"/>	<input type="checkbox"/>
10. Water Quantity	<input type="checkbox"/>	<input type="checkbox"/>

13b. Species/Habitat Factors Information Sources

For Species Information provide the source and indicate if the species listed are directly on-site at some point in their life stage (i.e. SaSI, WDFW Stream Catalog, Stream Survey/Field Observation, Limiting Factors Distribution Maps).

For Habitat Factors Information list the study/report and date identifying the habitat factors for your project (i.e. SaSI, limiting factors analysis, watershed analysis, other assessments or studies).

(ENTER ON PRISM TAB 11)

Study Name	Author	Date
Hood Canal/Water Resources Inventory Area (WRIA) 17 Limiting Factors Analysis	Washington State Conservation Commission	2002
Summer Chum Salmon Conservation Initiative	WDFW, Pt. No Pt. Treaty Tribes	2002
Salmon Habitat Recovery Strategy	HCCC	Version 03-2004
Hood Canal/eastern Strait of Juan de Fuca Summer chum Salmon Recovery Plan	HCCC	Current
Temporary residence by juvenile salmon in a restored estuarine habitat	Simenstad & R. M. Thom	1992
Juvenile residency in a marsh area in a marsh area of the Frazier River estuary.	D. A. Levy & T. J. Northcote	1982
Salmon & Steelhead Habitat Limiting Factors	G. Correa/WA Conservation Comm.	2003
Dosewallips River Habitat Assessment: coupling high-resolution remote sensing and ground surveys to prioritize aquatic conservation, Olympic Mountains, WA State	T. Labbe, R. Grotefendt, A. Carter-Mortimer, J. Jones	2005
Lower Dosewallips River Reach Analysis	B. Barnard (WDFW)	2004
Dosewallips Watershed Analysis	U.S. Forest Service	1999

14. Evaluation Proposal Estuarine/Nearshore Marine

Applicants must respond to the following items. The local citizen and technical advisory groups will use the evaluation proposal to evaluate your project. Applicants should contact their lead entity for additional information that may be required.

Up to eight pages may be submitted for each project evaluation proposal.

(SUBMIT INFORMATION VIA PRISM ATTACHMENT PROCESS OR ON PAPER)

I. BACKGROUND

Describe the fish resources, the current habitat conditions, and other current and historic conditions important to understanding this project. Be specific—avoid general statements. When possible, document your sources of information by citing specific studies and reports.

Western Washington's Puget Sound is a very large, complex system of estuaries that support tremendous biological productivity and diversity. The plankton-rich waters, kelp forests, eelgrass beds, and salt marshes sustain a vast array of wildlife species. Puget Sound is home to at least 7,000 species of invertebrates, 200 species of fish, 100 species of sea birds, and 26 species of marine mammals (Seattle District USACE 2004; PSAT 2005). Although the Sound still supports the largest area of remaining estuarine wetlands on the west coast, 73 percent of its salt marsh habitat has been lost since the 1800's (PSAT 2004). Many species that depend on nearshore and marine habitats, such as salmon, forage fish, marine birds, and orcas, have declined in numbers.

Hood Canal is a natural, glacier-carved fjord more than 60-miles long, which forms the westernmost waterway of the Puget Sound basin. Hood Canal is one of the most scenic marine environments of Puget Sound; it was also once one of the most productive. However, habitat loss and low dissolved oxygen levels threaten Hood Canal's health. The Hood Canal Salmon Enhancement Group would like to help reverse these trends.

The vital role estuaries play in summer chum salmon recovery is a basic tenant of salmon biology (Walters et al. 1978; Healy 1987; Levy and Northcote 1982). Properly functioning estuaries are recognized as a critical environment relating to the salmon lifecycle. The ability of estuaries to provide abundant food supply, wide salinity gradients, and diverse habitats is particularly important to anadromous fish in terms of rearing, feeding and osmoregulatory acclimatization (Macdonald et al 1987). The project area is located in the estuary of the Dosewallips River, the second largest tributary to Hood Canal, lying in south Jefferson County. The headwaters of the Dosewallips watershed are protected within Olympic National Park and Olympic National Forest, while the lower river reaches are mostly in private ownership. The Dosewallips estuary supports extensive mudflat, eelgrass, and emergent marsh habitats important to varied fish, wildlife, and shellfish

populations. Numerous recent planning efforts have highlighted the Dosewallips as among the most pristine riverine-estuarine systems in Hood Canal, offering one of the best chances for effective salmon habitat protection and recovery (Frissell et al. 2000, WDFW & PNPTT 2000, May and Peterson 2003). As a result, the Hood Canal Coordinating Council has designated the Dosewallips as one of eight Tier 1 watersheds in its Salmon Recovery Strategy (HCCC 2004).

The project area includes critical freshwater and estuarine habitat for two salmon stocks listed as threatened under the ESA, Puget Sound Chinook and Hood Canal Summer Chum. In addition, the river harbors a diversity of other fish species: fall chum, pink, coho, winter steelhead, rainbow, cutthroat, and sculpin populations, harboring at least eight distinct stocks.

In response to an identified lack of aquatic habitat information for the Dosewallips (USFS 1999, WDFW & PNPTT 2000) in 2001 the Port Gamble S'Klallam Tribe with support from the BIA initiated an assessment of riverine-floodplain habitat, coupling ground and remote sensing surveys (LIDAR and high-resolution digital photography). This work highlights important restoration opportunities in the watershed (including work outlined under this proposal), and provides data which will be essential to future project planning.

This property is currently under easement to the USFWS for the purpose of collecting adult spawners for brood stock at the Quilcene hatchery. The easement stipulates the USFWS must collect salmon at least once every 4 years. However at this time they have no need to collect at this site and would like to remove all vestiges of there presence and return the site to its original condition. This project will remove the man made structure and reopen the Northern Dosewallips estuary to estuary biological functions.

II. PROJECT HYPOTHESIS

Provide a hypothesis of how current habitat conditions and habitat forming processes will be improved or affected by this project. Describe a logical basis for the project, including which processes the proposed action will affect, what type of effect the action is expected have on processes, what types of structural changes are expected to occur as a result, and ultimately how this will lead to the proposed outcome. State the nature, source, and extent of the altered conditions that this project will address or help understand. Address the primary causes of the problem, not just the symptoms. Document your sources of supporting information by citing specific studies, reports, or other documentation.

Reconnecting isolated wetland habitats is a cost-effective and functionally effective approach for restoring wetland habitats, especially in coastal areas. This project proposes to completely remove Concrete raceways, storage facilities, fences, rip rap and all man made structures. As a part of restoring the natural tidal channel network, an enhanced channel will be designed to provide natural passage.

This project will address the disconnection of a significant estuarine marsh/ tidal channel area. The habitat functions (tidal inundation) conducive to

forming natural estuarine marsh/ tidal channel conditions will once again be allowed to exist. We hypothesize that removal of the structures will allow full tidal inundation, resulting in increases in tidal channel density and size, as well as complete re-colonization of salt marsh communities.

Historic tidal channels still persist within the diked area, although they have partially filled in with sediment and vegetation from the years of isolation from tidal action. The restored channels will provide for natural processes to form additional tidal channels on the 10-acre restoration site.

III. PROJECT GOALS AND OBJECTIVES

List the project's goals and objectives. Objectives are statements of specific outcomes that typically can be measured or quantified over time. Objectives are more specific than goals (visions of the desired future condition) and less specific than tasks (the specific steps that would be taken to accomplish each of the objectives). For example, the objectives of a nearshore project might be to increase tidal flushing, allow fish access and use, restore floodplain functions, sediment transport, dissipation, and water storage. Explain how achieving the objectives will address and help solve the problem identified in II above.

Describe how the project will benefit to salmon and provide significant ecological benefits. Describe how the project actions incorporate habitat important to key biota, i.e., the project should address sustainable habitats critical to the targeted species.

The objective of this project is to remove man made structures which inhibit adult and juvenile salmonid migration, while the goal is to restore natural habitat forming processes and habitats that provide critical functions to salmon.

It has been shown through the evaluation of historical coastal maps, that the habitat in this area has been gradually altered by the land changes promoted by human development. The removal of these structures will reestablish the connectivity to the larger estuarine complex.

Salmon Recovery Plans for both summer chum and chinook salmon note the importance of these estuarine complexes to the continued viability of local populations.

IV. PROJECT APPROACH

Briefly describe the geographic setting of the project (main stem, estuary, shoreline, marine, etc.) and the life cycle stage(s) affected. ***This project is located within a large portion of the estuarine complex of the Dosewallips River in Jefferson County adjacent to the town of Brinnon. This project will affect adult and juvenile salmonids which includes ESA-listed Summer Chum and Puget Sound Chinook.***

Estuaries are becoming better known for their importance to the life stages of juvenile salmon and for the successful return of spawning adults. Six species of salmonids occur within this estuary.

This project is located within the floodplain of the lower main stem and estuary of the Dosewallips River and Quilcene Bay in Jefferson County adjacent to the town of Brinnon. Army Corps standards and directives will apply for removing material and re-deploying inside and outside the flood plain.

Describe the landscape context of the project, i.e., scale and size of the project, connectivity in relation to surrounding habitats, and complexity of existing vs. restored habitats.

Even though this project area lies outside of Quilcene area it still composes the same nearshore issues as those closer to Quilcene. As described in the application for the Schinke dike removal project, this is a continuation of that process for returning Quilcene Bay nearshore to early 1900's levels. The nearshore area of Quilcene Bay and the Dosewallips estuary has been modified over the last 100 years, with the loss of salt marshes, freshwater marshes, tidal sloughs, and other associated habitats.

The project area no longer serves those agricultural/development needs. This project represents an effort to reconnect some of the fragmented habitats. The Quilcene Estuarine Wetlands Restoration and Protection Project is Phase 6 of the overall Quilcene Bay Ecosystem Restoration Project. Other phases of the project are identified in figure 2. Earlier phases are: 1. Big Quilcene riverine and estuarine dike removal north, completed 1995 (upper) and 2005 (lower). 2. Indian George Estuary restoration completed 2000 to 2001. 3. Donovan Creek tidal prism restoration funded and scheduled for completion in 2006. 4. Nylund saltwater dike removal & estuarine marsh restoration funded and scheduled for completion in 2007. 5. Little Quilcene riverine dike removal and estuarine channel restoration funded and scheduled for completion in 2007 to 2008. Future phases will likely include: 7. Little Quilcene delta cone removal. 8. Big Quilcene delta cone removal. 9. Big Quilcene estuarine channel restoration. 10. Beck estuarine marsh restoration. 11, other projects including Dosewallips River Estuary. The individual 10 phases are envisioned to work together as a single large estuary restoration project that together will restore ecosystem processes in Quilcene Bay while the Dosewallips is a stand alone project.

List the individuals and methods used to identify the project and its location. ***This project was brought to our attention by Ron Wong of the USFWS Quilcene hatchery in their efforts to assist in habitat restoration.***

Describe the consequences of not conducting this project at this time. For acquisition projects, also describe the current level and imminence of risk to habitat. Describe the project design and how it will be implemented. ***This project, like many others, if not done now, will prolong the restoration of critical estuarine functions and continue to limit salmon productivity within the watershed. Design is being implemented through on site surveys, aerial photographs and lidar imagery by qualified environmental engineers with experience in this arena. The sooner we begin to restore our estuaries and nearshore environments throughout Hood Canal, the sooner we will see salmon recovery. The importance of estuaries to***

salmonids has been well stated. This is a straight forward project which is waiting to be implemented. There are no landowner concerns nor are there any legal obligations associated with this project. We currently have an extremely willing landowner which provides an impetus to move quickly. The project design is being developed by the Hood Canal Salmon Enhancement Group with collaboration with the WDFW, USFWS and the HCCC.

Explain how the project's cost estimates were determined. ***The project cost estimates were determined through a professional environmental engineering service with a long history in environmental projects and methods.***

Describe other approaches and opportunities that were considered to achieve the project's objectives. ***No other companies, agencies and agents were consulted about alternative methods for the removal of these structures. All information was studied to determine the best approach for this particular system and as it is a very straight forward project, the engineering was also straight forward.***

If the project includes an acquisition element, then briefly describe the extent to which habitat to be acquired is currently fully functioning and/or needs restoration; the timeframe in which responses or improvements in habitat functioning are expected; and the continuity of the proposed acquisition with other protected or functioning habitat in the reach. ***N/A***

Identify the staff, consultants, and subcontractors that will be designing and implementing the project, including their names, qualifications, roles and responsibilities. If not yet known, describe the selection process.

Lead Engineer – Pat McCullough ESA Inc. Over 60 environmental projects completed in Hood Canal Watershed.

Randy Johnson – WDFW

Ron Wong – USFWS

Al Latham – Jefferson County Conservation District

Rich Carlson - USFWS

Other selected by experience in nearshore and estuary issues and familiar with Hood Canal Watershed which at this time is yet to be completed.

Contractors for this project will be selected from bids received from local contractors on the HCSEG's small contractor work list through a sealed bid process.

List project partners. When appropriate, include a letter from each participating partner briefly outlining its role and contribution to the project. (See Section 15 for a sample format.)

The main partners in this project are the USFWS, the Quilcene Hatchery, and the HCSEG

List all landowner names. Include a signed form from each landowner acknowledging their property is proposed for SRFB funding consideration. (See Section 16 for a sample format.) ***The property is owned and managed by the USFWS.***

Describe how the project will contribute to our understanding of the ecosystem or how to restore it. ***There are many estuaries on Hood Canal which have been similarly impacted by development such as this. Lessons will be learned of the effects of removing long-existing impacts which over time have increased dramatically. There will be more reliability in predicting the effects of removals on more land-sensitive river systems.***

This is a very certain project in allowing fairly immediate access to areas where obstacles have prevented salmonid migration for many decades. It is a cost effective and efficient method to achieve success in one season. All project activities will be timed to minimize disturbance to salmonids.

There is very little uncertainty about the results of this project. It is straight forward and we are removing human impact on the site. The USFWS has been consulted for comparisons and their input.

Provide the performance measures associated with the project. Every recovery action must have explicit performance measures that directly relate to the goals of the project, i.e., growth rates or survival of salmon, sedimentation rates, change in recruitment of large wood, and change in the amount of specific habitat type(s).

Performance measures in this project revolve around several habitat factors known to correlate with juvenile salmon survival. By increasing nearshore habitat more juveniles will survive to return as adults. The evaluation regarding salmon productivity will begin in 3 years after completion of adult spawner counts. The HCSEG is well trained to do so and will monitor with other partners into the future. Immediate monitoring will include measuring changes in salinity within newly opened channels, salmon usage of newly opened channels, vegetation characteristics, and estuarine surface area.

Describe the long-term stewardship and maintenance obligations of the project. Projects should be consistent with habitat forming processes in the watershed, requiring reduced up-keep and long-term maintenance over time.

The HCSEG has developed a long range monitoring plan which includes estuary evaluation and monitoring. We also include long term maintenance with all of our programs and have funding in place to deal with unexpected problems. We have returned on request every time an issue has come forward about one of our projects. During project construction and after the HCSEG will monitor the site for construction integrity and HPA compliance, any adaptive measures will be taken to ensure site stability. Upon completion of the project, the site will be monitored for fish and wildlife use. Photo documentation of the physical evolution of the site prior to following restoration will be maintained by local biologists, and the site will be monitored into the near future for effectiveness, however the site should be self-sustaining after the restoring the physical process.

Each project should include an adaptive management type of approach that provides some level of contingency planning. Explain how you will address these constraints. ***The HCSEG has a contingency fund built into our budgets to deal with unforeseen problems or needs. As with all environmental projects, there is always something that comes up that was not expected. We start each project with the realization that this might happen and then prepare for the situation and respond accordingly. We have never been caught in a situation that could not be corrected to everyone's satisfaction.***

V. TASKS AND TIME SCHEDULE

List and describe the major tasks and time schedule you will use to complete the project. ***Preliminary engineering and design is complete. Permitting will begin by the December 2006 and construction should be implemented by July 15 2007 with completion prior to October 15 2007.***

VII. CONSTRAINTS AND UNCERTAINTIES

Describe the relationships between uncertainty, risk, expected ecological benefits, and potential learning that may affect successful completion of the project. Not everything will go as expected.

There is not a project we are involved with that adaptive management does not come into play. One can never tell exactly what issues might arise but we try to bring as many people as possible into the equation so as to limit this liability. There are few biological uncertainties that might come up we have not already taken into consideration.

Describe the costs of the project relative to other factors. Project costs relative to such factors as risk, uncertainty and the expected benefits should be considered. Maintenance, contingency, adaptive management, and monitoring costs should all be considered in the overall cost of any protection or restoration project.

As explained in previous questions, the HCSEG has a contingency fund built into our budget to deal with unforeseen problems or needs. As with all environmental projects, there is always something that could come up that was not expected. We start each project with the realization that this might happen and then prepare for the situation and respond accordingly. We have never been caught in a situation that could not be corrected to everyone's satisfaction. The future maintenance of the project will be the responsibility of the property owner with maintenance assistance from HCSEG. The HCSEG will continue the long term monitoring and evaluation of the site.

15. Project Partner Contribution Form

Project Partner: HCSEG

Partner Address: PO Box 2169 Belfair, Washington 98528

Contact Person

☐ Mr. ☐ Ms. Title Executive Director

First Name: Neil Last Name: Werner

Contact Mailing Address: PO Box 2169 Belfair, Washington 98528

Contact E-Mail Address: neil@hcseg.org

Description of contribution to project: Cash

Estimated value to be contributed: \$__15,600_____

Partner's signature

Date

16. Landowner Willingness Form

Landowner Information:

Name of Landowner: USFWS

Landowner Contact Information:

☒ Mr. ☐ Ms. Title

First Name: Ron Last Name: Wong

Contact Mailing Address:

Contact E-Mail Address:

Property Address or Location:

I certify that _____ is the legal owner of property described in this grant
(landowner or organization)

application to the Salmon Recovery Funding Board (SRFB). I am aware the project is being proposed on said property. My signature authorizes the applicant listed below to seek funding for project implementation, however, does not represent authorization of project implementation.

Landowner Signature

Date

Project Applicant Information

Project Name: Dosewallips River Estuary Restoration Project

Project Applicant Contact Information:

☐ Mr. ☐ Ms. Title Executive Director

First Name: Neil Last Name: Werner

Contact Mailing Address: PO Box 2169 Belfair, Washington 98528

Contact E-Mail Address: neil@hcseg.org

Lead Entity Organization: Hood Canal Coordinating Council